Amendments to the Claims:

1. (Currently Amended) A device for supporting chromophoric elements, comprising a substrate having an upper face on which said chromophoric elements are fixed and means for enhancing the quantity of light emitted by the chromophoric elements toward a collecting device, said means being selected from a group consisting of ~~or comprising~~:

- reflective means placed in the substrate at a distance from [[its]] said upper face;
- microlenses each associated with a chromophoric element and functioning in transmission or in reflection;
- diffraction means placed at a distance from the chromophoric elements and functioning in transmission or in reflection;
- first mirror means and second mirror means parallel to each other and placed on either side of the chromophoric elements to define an asymmetric resonant cavity;
- a planar wave guide formed in the substrate below the upper ~~surface~~ face carrying the chromophoric elements, to capture a portion of the light emitted by the chromophoric elements into the substrate and/or to supply excitation light;
- a configuration of the upper face of the substrate, formed as wells with a reflective bottom and filled with a material with a suitable index each receiving a chromophoric element; and
- planar resonators formed in the upper face of the substrate.

2. (Currently Amended) A device according to claim 1, wherein ~~the substrate comprises a~~ said reflective means are placed at a distance (d) from the upper face, this distance (d) satisfying the relationship $d > n\lambda/2NA^2$.

3. (Currently Amended) A device according to claim 1, ~~comprising~~ wherein said microlenses are formed in a layer of the substrate at a distance from each chromophoric element and arranged to focus the light emitted into the substrate towards the collecting device.

4. (Currently Amended) A device according to claim 1, ~~comprising~~ wherein said diffraction means are formed in a layer of the substrate at a distance from the chromophoric elements and arranged so as to diffract the light emitted into the substrate towards the collecting device.

5. (Currently Amended) A device according to claim 1, wherein ~~the substrate comprises a~~ said first mirror is integral with the substrate and said second mirror is a ~~second,~~ semi-reflective mirror placed facing the chromophoric elements, substantially parallel to the first mirror and at a distance therefrom selected to define [[an]] said asymmetric resonant cavity, in particular of the Fabry-Perot type, and arranged to deliver the emitted light to the collecting device by transmission.

6. (Previously Presented) A device according to claim 5, wherein the second mirror is formed on an entrance face of an objective of the collecting device.

7. (Previously Presented) A device according to claim 5, wherein the second mirror is formed on an entrance face of a microscope observation coverslip.

8. (Cancelled)

9. (Currently Amended) A device according to claim 1, wherein ~~the substrate comprises an integrated~~ said asymmetric resonant cavity~~, in particular~~ is of the Fabry-Perot type, is integrated in the substrate, and is placed below an upper layer, which is at least partially permeable, vertically and/or laterally, to allow migration of the chromophoric elements towards sites selected ~~relative to~~ inside the resonant cavity.

10. (Currently Amended) A devicc according to claim 9, wherein said cavity is defined by ~~two mirrors~~ said first and second mirror means.

11. (Previously Presented) A device according to claim 9, wherein said upper layer is produced from a porous material, in particular silica gel.

12. (Previously Presented) A device according to claim 9, wherein the upper layer comprises holes at selected locations, to encourage migration of chromophoric elements towards said sites.

13. (Previously Presented) A device according to claim 10, wherein at least one of the mirrors is constituted by a multiplicity of dielectric layers.

14. (Previously Presented) A device according to claim 13, wherein the dielectric layers are produced from materials selected from the group formed by semiconductors, oxides, glasses, nitrides, organic polymers or organometallic polymers.

15. (Previously Presented) A device according to claim 14, wherein the polymers are selected from the group formed by amorphous polymers and "orientated" and birefringent polymers.

16. (Previously Presented) A device according to claim 1, wherein the upper face of the substrate has a n- dimensional structure, n being a whole number equal to 2 or more, with dimensions selected as a function of the wavelength of the emitted light.

17. (Previously Presented) A device according to claim 16, wherein said structure comprises a multiplicity of parallel linear three-dimensional structures, selected from the group formed by channels and ribs, which are U shaped or V shaped or parabolic or elliptical in shape.

18. (Previously Presented) A device according to claim 17, wherein each of the tops or interstices of the parallel linear three-dimensional structures can receive chromophoric elements.

19. (Previously Presented) A device according to claim 17, wherein at least a portion of the space separating said parallel linear three-dimensional structures comprises a reflective material above which is placed a filler material with a selected index, said chromophoric elements being intended to be placed on said filler material or on the tops of the three-dimensional structures.

20. (Previously Presented) A device according to claim 16, wherein said structure comprises a two-dimensional or three-dimensional array of holes or columns, defining a photonic crystal and resonant cavities associated with the chromophoric elements.

21. (Previously Presented) A device according to claim 20, wherein said photonic crystal is of the photon band gap type.

22. (Previously Presented) A device according to claim 16, wherein said structure comprises a multiplicity of three-dimensional wells, filled with a material having a high index with a reflective material interposed at the bottom of each well and each well being capable of receiving at least one chromophoric element on said filling material.

23. (Previously Presented) A device according to claim 22, wherein the configuration of the three-dimensional wells is selected from the group formed by parabolas of revolution, ellipses of revolution, and n-dimensional facets, n being a whole number equal to 1 or more.

24. (Currently Amended) A device according to claim 16, wherein said structure comprises, for each chromophoric element, [[a]] one of said planar resonators capable of storing electromagnetic energy from the field it induces and arranged so that the associated chromophoric element is positioned substantially at the antinode of said electromagnetic field.

25. (Previously Presented) A device according to claim 24, wherein the planar resonator comprises at least two three-dimensional concentric circular channels, said chromophoric element being placed substantially in the center of said channels.

26. (Previously Presented) A device according to claim 24, wherein the planar resonator comprises a multiplicity of three-dimensional channels defining a lamellar grating, the chromophoric elements being placed substantially at the center of said lamellar grating, and said channels having a form selected from the group formed by rectangular shapes and parallel linear shapes.

27. (Previously Presented) A device according to claim 24, wherein said planar waveguide is placed substantially below the chromophoric elements and arranged to collect the light emitted by said chromophoric elements in the direction of support means and guide it in the direction of the planar resonator.

28. (Previously Presented) A device according to claim 1, wherein said group comprises means capable of ensuring localized resonances by local reinforcement of the electromagnetic field induced by the presence of nanometric holes, which may or may not be regular, produced in selected metals, in particular in silver (Ag) or gold (Au).

29. (Previously Presented) A device according to claim 28, wherein said nanometric holes or structures are arranged to locally enhance emission and/or excitation, by a mechanism of the type occurring in surface enhanced Raman scattering.

30. (Previously Presented) A device according to claim 28, wherein the upper face of the substrate comprises an irregular film of silver or a multiplicity of organized silver nanostructures, said film or said nanostructures being capable of receiving chromophoric elements.

31. (Currently Amended) A device according to claim 1, wherein the substrate is associated with a matrix of charge coupled (CCD) light detection elements, at least some of these ~~detecting~~ <u>detection</u> elements being capable of being electronically addressed in correspondence with at least one chromophoric element.

32. (Previously Presented) A device according to claim 31, wherein certain detection elements are associated with zones having a reference activity signal, such that a differential measurement can be carried out between detection elements associated with chromophoric elements and detection elements associated with reference zones.

33. (Currently Amended) A device according to claim 32, wherein to detect the chromophoric elements emitting over at least two different wavelengths, the device comprises wavelength filtering means selectively associated with <u>said</u> detection elements for detecting two emitted wavelengths and for differential treatment of exit signals from said detection elements.

34. (Currently Amended) A device according to claim 31, ~~comprising between the matrix and substrate,~~ <u>wherein said</u> reflective means <u>are</u> arranged <u>within the substrate</u> to reject light intended to excite the chromophoric elements.

35. (Currently Amended) A device according to claim ~~31~~ <u>3-1</u>, comprising an absorbent layer that is insensitive to the angle of incidences located between the matrix of detection elements and said reflective means ~~arranged below the chromophoric elements~~.

36. (Previously Presented) A device according to claim 1, wherein the collecting device comprises a matrix of photodetectors arranged above the upper face of the substrate carrying the chromophoric elements and receiving light emitted by the chromophoric elements through a filter for rejecting excitation light.

37. (Previously Presented) A device according to claim 1, comprising two photodetector matrices placed respectively below and above the chromophoric elements

and associated with rejection filters for receiving the light emitted by the chromophoric elements over two distinct wavelengths.

38. (Currently Amended) A device according to claim 1, wherein said [[a]] planar waveguide is placed substantially below the chromophoric elements and arranged to collect the light emitted by said chromophoric elements in the direction of the substrate and to guide it towards the collecting device.

39. (Currently Amended) A device according to claim 1, ~~comprising a~~ <u>wherein</u> said planar waveguide ~~for supplying~~ <u>supplies</u> excitation light to the chromophoric elements.

40. (Previously Presented) A device according to claim 39, wherein the planar waveguide comprises, in a neutral zone of the substrate, a grating with a low thickness modulation for coupling the excitation light.

41. (Previously Presented) A device according to claim 38, wherein the waveguide comprises channels close to each chromophoric element, said channels defining a blazed grating arranged to direct the light collected by the waveguide towards the collecting device.

42. (Previously Presented) A device according to claim 1, wherein the chromophoric elements are selected from the group formed by molecules that can emit chromophoric or chromogenic signals and semiconductor nanostructures bound to the upper face of the substrate and capable of receiving a probe (respectively a target) that can interact with a target (respectively a probe).

43. (Previously Presented) A device according to claim 1, wherein the chromophoric elements are couples comprising a target (respectively a probe) having interacted with a probe (respectively a target) integral with the upper face of the substrate.

44. (Currently Amended) A device according to claim 1, wherein ~~the substrate comprises a first~~ said reflective means are at a distance d from the upper face, the distance d satisfying the relationship $d<n\lambda/2NA^2$ and being selected to ensure the presence of a field antinode of the emitted light at the upper face on which the chromophoric elements are fixed.

45. (Currently Amended) A device according to claim ~~1~~ 44, wherein the substrate is arranged to receive excitation light intended to excite chromophoric elements at an angle of incidence with respect to the normal to the upper face, said distance d and the angle of incidence of the excitation light being selected to ensure the presence of a field antinode of the excitation light at the upper face of the substrate.

46. (Currently Amended) A device according to claim 44, wherein ~~the first~~ said reflective means comprises a metallic layer.

47. (Currently Amended) A device according to claim 44, wherein ~~the~~ said reflective means comprises a plurality of dielectric layers.

48. (New) A device according to claim 1, wherein said reflective means comprises a plurality of dielectric layers.